

SUMMARY OF RESULTS.

Made on B. and W. No. 2 Boiler, at McGill University.
To Determine quality of C. J.

Kind of Fuel—Georges Creek.

Kind of Furnace—Wired bars, 30'

Method of Starting and Stopping Test—Alternate (A.S.M.E.)

Water Heating Surface (sq. ft.)—16.79.

Superheating Surface (sq. ft.)—Nil.

Barometer at start—29.66.

At finish—29.62.

TOTAL QUANTITIES.

1. Date of trial.....
2. Duration of trial (hours).....
3. Weight of coal as fired (lbs.).....
4. Percentage of moisture in coal (%).....
5. Total weight of dry coal consumed (lbs.).....
6. Total ash and refuse (lbs.).....
7. Percentage of ash and refuse in dry coal (%) (a) from analyses 13-85; (b) wet
8. Total weight of combustible consumed, from analyses (lbs.).....
9. Total weight of water fed to the boiler, corrected for difference of level (lbs.)
10. Equivalent water evaporated from actual feed water temperature and boiler pressure (lbs.).....
11. Equivalent water evaporated into dry steam from and at 212° F. (lbs.).....

HOURLY QUANTITIES.

12. Dry coal fired per hour (lbs.).....
13. Dry coal per square foot of grate surface per hour (lbs.).....
14. Water evaporated per hour corrected for quality of steam (lbs.).....
15. Equivalent evaporation per hour from and at 212° F. (lbs.).....
16. Equivalent evaporation per hour from and at 212° F. per square foot of water heating surface (lbs.).....

AVERAGE PRESSURES, TEMPERATURES, ETC.

17. Steam pressure by gauge (lbs. / sq. in.).....
18. Temperature of feed water entering boiler (deg. F.).....
19. Temperature of escaping gases from boiler (deg. F.).....
20. Pressure of draft between damper and ash-pit (ins. of water).....
21. Percentage of moisture in steam or number of degrees superheating.....

HORSE-POWER.

22. Horse-power developed (Item 15 ÷ 34).....
23. Builders' rated horse-power.....
24. Percentage of builders' rated horse-power developed.....

ECONOMIC RESULTS.

25. Water apparently evaporated under actual conditions per lb. coal as fired (Item 9 + Item 3).....
26. Equivalent evaporation from and at 212° F. per lb. coal as fired (Item 11 + Item 3).....
27. Equivalent evaporation from and at 212° F. per lb. of dry coal (Item 11 + Item 5).....
28. Equivalent evaporation from and at 212° F. per lb. of combustible consumed (Item 11 + Item 8).....

EFFICIENCY.

29. Calorific value of dry coal per lb. (B.T.U.).....
30. Calorific value of the combustible per lb. (B.T.U.).....
31. Efficiency of boiler (based on combustible) (%).....
32. Efficiency of boiler, including grate (based on dry coal) (%).....

FLUE GASES.

33. Dry flue gas per lb. carbon (from gas analyses) (lbs.).....
34. " " of combustible consumed (from gas analyses) (lbs.).....
35. " " dry coal (from gas analyses) (lbs.).....
36. Proportion of heat of fuel in escaping dry flue gases (%).....